



Decentralized heat recovery unit - for class rooms ≤ 1100 m³/h (counterflow) type Eversky

Heat recovery unit with high efficiency up to 85% for ceiling mounting or semirecessed installation in the ceiling. The range includes 4 sizes and for flow rates from 150 to 1.100 m³/h.

Every **Eversky** model comes standard with a built-in CO₂ regulation.

- The **Eversky** unit is available in 4 versions: **EVERSKY FIRST** (Basic unit with 2 filters, 2 fans and counterflow)

 - EVERSKY SMART (First with electric preheating battery)
 EVERSKY PREMIUM (First with electric OR water post heating battery)
 EVERSKY INFINITE (Premium with electric preheating battery)
- The **Eversky** is a self-regulating unit with an extensive regulation module. This unit is <u>only intended for an indoor installation</u>. The **Eversky** is the only school unit with a EUROVENT certificate!

Brand

R-COVERY by ZEHNDER CALADAIR

Application

- Decentralized school unit
- Selfregulating ventilation and high efficiency heat recovery in non residential and industrial applications
- Suitable for renovations: schools, nurseries, offices and commercial buildings
- Air filtration, temperature and CO₂ control
- Compact monoblock ventilation unit, with plug & play and energy-saving control system (EN 15232)

Composition

- Double skinned panels with high-density mineral wool insulation 25 mm (M0), fire class A2-S1
- Outer layer: prelacquered steel plate in pure white (RAL 9010) with protective film Inner layer: galvanized steel plate 10/10 Large doors for easy access to the internal elements patented system

- Patented mounting frame for easy ceiling mounting Round connections with lip sealing for all models Patented connection system: one type of unit that can be easily converted on site from rear connections to side or top connections Materiaed deceases for authors to side or top connections
- Motorised dampers for outdoor air and exhaust air included Sloping and removable condensate tray; drain via siphon or via condensate pump (option)
- Built-in 100% Bypass, motorised and auto regulating
 Built-in regulation with external display IP65 (supplied loose in the unit)
- DIVA regulation: CO₂ controlled ventilation

 - The unit is equipped with a Corrigo controller version 5.
 The touchscreen controller type Easy 5.0 is supplied separately in the unit
 - The controller is supplied with 2m cable

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Heat recovery units

Eversky

Non residential **Counterflow heat** exchanger R-COVERY by ZEHNDER CALADAIR Qv ≤ 1100 m³/h Horizontal Decentralized unit with heat recovery







Heat recovery units

- This cable can be extended on site to a maximum of 100m
- Integrated FREE COOLING and NIGHT COOLING function
- Supply grille with double deflection in RAL9010
- Built-in temperature sensors (4)
- Built-in clock for operation between two flow rates
- Built-in week clock and public holidays
- Safety switch
- Pressure switch on inlet filter F7
- Pressure switch on each fan Standard Modbus or Bacnet available
- Only available in right execution (see configuration)

Fan

- Direct driven EC motor with electronic commutation (EC) with high efficiency, thermal protection and integrated speed control
- The EC technology ensures limited energy consumption by managing and controlling the operating point (regulation from 10 to 100%)
- Low noise level (< 35dB(A) at maximum speed at 1m) for a better acoustic comfort

Exchanger

- Static counter-flow heat exchanger made of seawater resistant aluminium
- Efficiency >85% (EN308)
- Frost protection by means of bypass control

Filter

- Filters are placed directly in front of the components for optimal protection

- Mounted on sliding rails with lip seals to ensure efficient air tightness
 Eversky basic configuration with a F7 ISO 16890 ePM1 55% (inlet air and exhaust air) filter
 F7 high efficiency filter: 10x higher filtration surface than a gravimetric filter and life span 2.5x longer

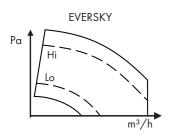
Versions

- EVERSKY FIRST (Basic unit with 2 filters, 2 fans and counterflow)
- **EVERSKY SMART** (First with integrated electric preheating battery) **EVERSKY PREMIUM** (First with integrated post heating battery)
- EVERSKY PREMIUM BE: ventilation unit with electric post heating battery
 EVERSKY PREMIUM BC: ventilation unit with water heating battery
 EVERSKY INFINITE (Premium with integrated preheating battery)

- EVERSKY INFINITE BE: ventilation unit with electric post heating battery
- EVERSKY INFINITE BC: ventilation unit with water heating battery

Options

DIVA®: Proportional modulating flow rate (between a set min. and max. flow rate) of each fan according to a built-in CO₂ measurement. The amount of CO₂ (number of ppm) is adjustable in the control.



Certification

- The device is tested according to NBN EN 308: www.epbd.be
- Efficiency of the heat exchanger of more than 85% (EN308), in accordance with RT2012 and ErP 2009/125/EC directives EUROVENT classifications according to EN1886 and EN13053 (model box AIRFLAT)
- Standard construction with double skinned panels of 25mm
- Mechanical strength class: D1
- Air tightness: Class L1
- Conductivity: T3 Thermal bridge factor: TB3
- Filter leakage class: F9
- Exterior panel made of lacquered steel 10/10 Finish RAL7035 25µm, gloss 40%, film 80µm Inner panel made of galvanized steel 10/10
- Insulation: high density 25mm mineral wool, fire class A2-S1 (M0)



Heat recovery units

Accessories

- Galvanised canopy with grille, type UT
 Digital control ED Touch for controlling of GTDHR(V), Hexamotion(-S), Freetime(-S), Silvertop, Neotime, Eversky units
 Spare filter FS-EVERSKY
 Connection piece for fittings, type MDV

Text for tender

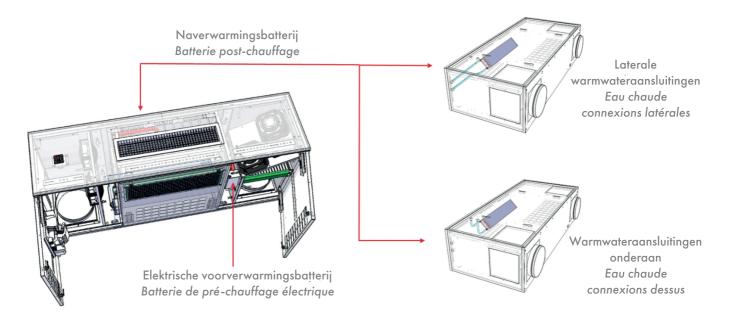
See downloads

Order example

EVERSKY 500 PRE BE D

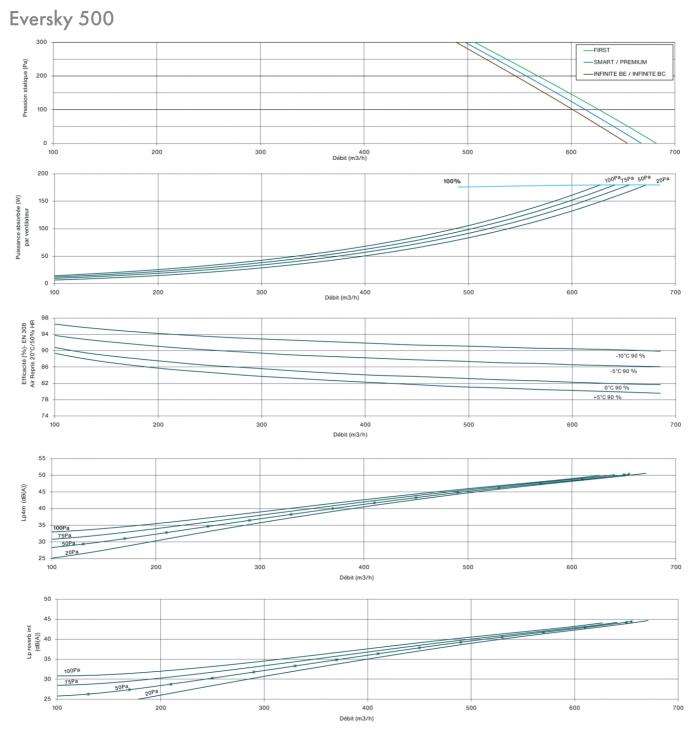
Explanation **EVERSKY** = type of heat recovery unit 500 = size (500-750-900-1100) First = First uitvoering **Smart =** Smart uitvoering **PRE** = Premium version **INF** = Infinite version **BE** = with electric battery **D** = DIVA EC regulation

Battery



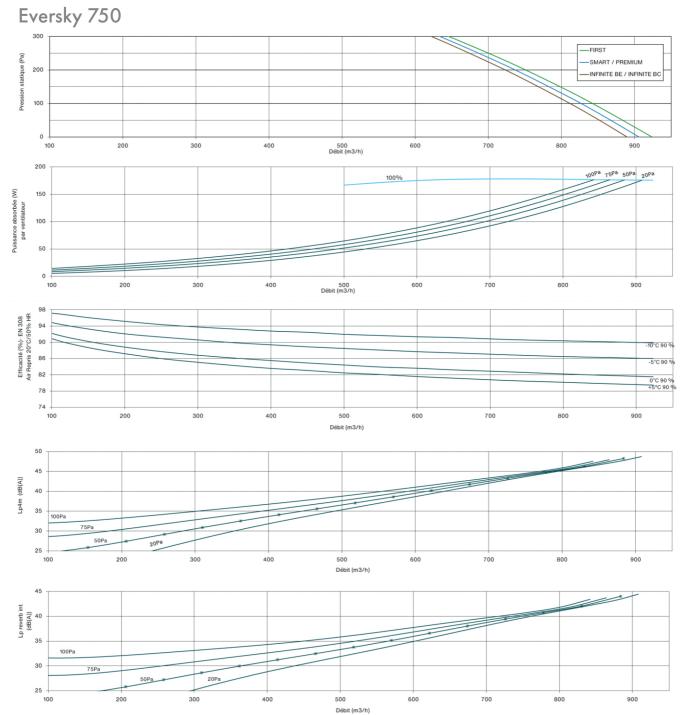


Heat recovery units



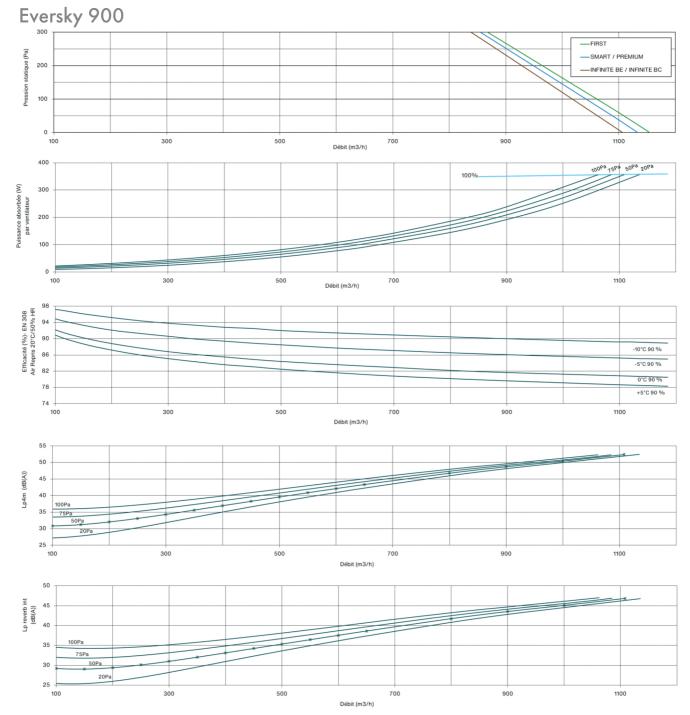


Heat recovery units



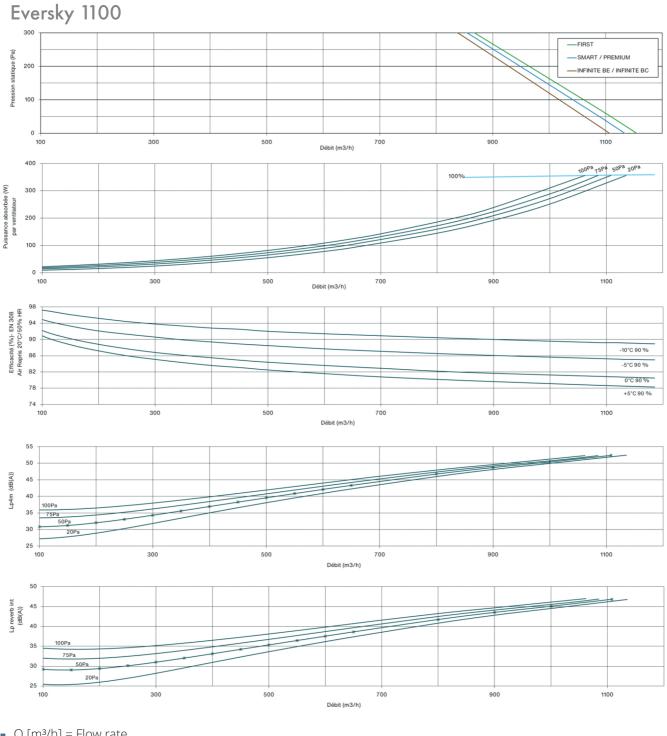


Heat recovery units





Heat recovery units



- Q [m³/h] = Flow rate
 Pst [Pa] = Static pressure
 P_{bat} [Pa] = Pressure loss batteries
 BE = Electrical battery

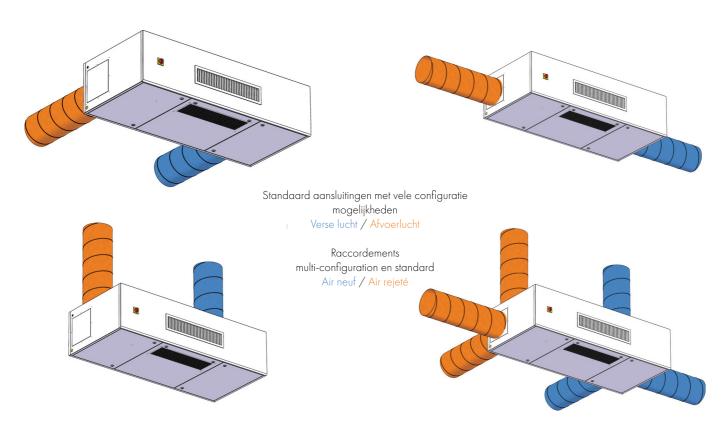
- BE = Electrical battery
 BC = Ho twater battery
 P_{ab} [W] = Absorbed power per fan
 η [%] EN 308 (20°C / 50%) = Efficiency
 Lwa pu = Sound power level in duct motor side
 Lwa ex = Sound power level in duct filter side
 Lpa @ 4m = Sound pressure level in free field with mounted inlet and outlet flanges



Heat recovery units

				Ĩ	rechnical data								
P T			FIRST / PREMIUM BC				SMART / F	PREMIUM B	INFINITE BE				
[W] [°C/°C]			[V/PI	h/Hz]	[A]		[V/Ph/H	z]	[A]	[V/Ph/Hz]	[A]		
500 2 x 169 -25 / 60 IF	254/B P	ΓI	230/	'1/50	2.7		230/1/5	0	7	230/1/50	11.4		
750 2 x 170 -25 / 60 IF	254/B P	ΓI	230/	1/50	2.8	230/1/50			8.2	230/1/50	13.7		
900 4 x 169 -25 / 60 IF	254/B P	TI	230/	′1/50	5.3	230/1/50			10.8	230/1/50	16.3		
1100 4 x 170 -25 / 60 IF	254/B P	TI	230/	′1/50	5.5	230/1/50			11	230/1/50	16.5		
					Battery								
					lectric battery								
EVERSKY 500													
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15			
Air flow rate	[m3/h]		500 500				500		500				
Version		FI	FIRST SMART			PREMIUM BE			INFINITE BE				
Type of battery				Preheating battery		Post heating battery			Preheating battery + post heating battery				
Capacity	[kW]				1		1		1	1+1			
Temperature at air outtake of unit	[C°]	16.2	16.3	16.3	14.6	22.2	22.3	19.6	22.3	20.6			
					EVERSKY 750								
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15			
Air flow rate	[m3/h]		750 750			750			750				
Version		FIE	FIRST SMART			PREMIUM BE			INFINITE BE				
Type of battery				Preheating battery			heating ba	attery	Preheating battery + post heating battery 1.25 + 1.25				
Capacity	[kW]		- 1.25		1.25								
Temperature at air outtake of unit	[C°]	16.5				21.5 21.7 19.6			21.7	21.7 18.6			
			_		EVERSKY 900		-						
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15			
Air flow rate	[m3/h]		900 900 FIRST SMART			900 PREMIUM BE			900 INFINITE BE				
Version	_	FI											
Type of battery	ri a a ri			Preheating battery 1.25		Post heating battery			Preheating battery + post heating battery 1.25 + 1.25				
Capacity Temperature at air outtake of unit	[kW] [C°]	10.2	16.3 16.5 16.6		12.8	1.25 20.5 20.7 17.7		177	20.8	+ 1.25			
Temperature at air outtake of unit		10.5	10.5		EVERSKY 1100	20.5	20.7	17.7	20.8	17.0			
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15			
Air flow rate	[m3/h]		00		100		1100		-10				
Version	[ms/n]	FIE		SM	PREMIUM BE			INFINITE BE					
Type of battery					ng battery	Post heating battery			Preheating battery + post heating battery				
Capacity	[kW]				1.25		1.25			+ 1.25			
Temperature at air outtake of unit	[C°]	16.4	16.6	16.8	14.9	19.8	20.0	17.1	20.2	18.4			
remperature at an outlake of unit		10.4	10.0	10.0	14.5	19.0	20.0	17.1	20.2	10.4			

Horizontal configurations - side by side flow - top view



The Eversky is **only** available in a **right** execution, viewed from the top of the device, following the direction of the airflow. **This unit is supplied as standard with the possibility to easily change rear connections to side or top connections on site!**

		Ø [mm]	A [mm]	A1 [mm]	A2 [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	F [mm]	F1 [mm]	M [mm]	M1 [mm]	N [mm]	X [mm]	[kg]
5	00	250	1670	490	645	815	445	1297	185	230	742	384	332	170	130	70	132
7	50	315	1985	555	830	900	510	1547	220	260	927	449	415	170	170	70	170
9	00	315	1985	555	830	900	510	1547	220	260	927	449	415	170	170	70	180
11	100	315	2365	615	1085	1050	530	1924	220	280	1185	510	565	170	190	70	220



Heat recovery units

